

rally, like the Lepidoptera, sparing in individuals ; we attribute it to the uninterrupted extent of monotonous forest over which animal life is sparingly but widely scattered. However this makes a difference in the commercial value of the subjects. The present collection is the fruits of two months' devoted and almost exclusive attention to insects. Shells and Orchids continue to be exceedingly scarce."

*How to prevent the Attacks of the Bed-bug, Cimex lectularius.*

By JOHN BLACKWALL, F.L.S.

*To Richard Taylor, Esq.*

Oakland, December 7th, 1848.

MY DEAR SIR,—A short communication of mine, printed in the 'Annals and Magazine of Natural History,' second series, vol. ii. pp. 357–359, recommending the adoption of a method of preventing the attacks of the bed-bug, founded on the fact, established by observation and experiment, that this loathsome insect, in consequence of not being provided with a climbing apparatus, is incapable of ascending hard dry bodies having highly polished perpendicular surfaces, has elicited, I perceive, a few strictures from the pen of your correspondent Walter White, Esq., to the purport, that the plan proposed is neither new in kind nor efficient in operation ('Annals and Magazine of Natural History,' second series, vol. ii. pp. 457, 458).

To the spirit in which the strictures are made, no objection can possibly be entertained ; but I may be allowed to remark, that the sole object I had in contemplation when obtruding upon the readers of your widely-circulated Journal my thoughts in connexion with this practical application of entomological knowledge to the domestic comfort of thousands of human beings, was public utility ; whether the scheme propounded had novelty to recommend it or not, I had small means of ascertaining, and, indeed, did not stop to inquire, being satisfied that, speaking generally, it was, at all events, either unknown or strangely disregarded.

With reference to the only circumstance advanced by Mr. White as militating against the efficacy of the project I have enunciated ; namely, that bugs are in the habit of crawling up walls and along ceilings until they perceive that they are directly over beds, when they quit their hold of the plaster and drop upon them, I would observe, that although neither reading nor personal experience had made me acquainted with this remarkable instinctive phenomenon in the natural history of the bed-bug, yet the idea had occurred to my mind that such a descent might sometimes happen accidentally ; but that as it would probably be a rare event, and, except in the case of an impregnated female, would not be likely to produce permanent inconvenience, any special provision to counteract it was deemed unnecessary. Considered as the result of an innate propensity this act assumes a widely different character, and it becomes a matter of importance to determine in what manner it can be guarded

against : fortunately the difficulty is not great ; a canopy composed of any light compact material closely attached to a wooden frame in whose outer margins glass cylinders are so far imbedded as to leave a bold, convex, exterior surface, would completely answer the purpose. This canopy, whose area must exceed that of the bed, may be supported on the summits of the bedposts or suspended from the ceiling, as may be most convenient ; and if its periphery were constructed without angles, it would be a decided advantage. When the extreme difficulty of extirpating bugs from rooms, especially in old houses where they have been suffered to multiply to excess, is borne in mind, the desirableness of possessing the means of securing beds from their insidious approaches will scarcely be denied.

The plan of protection against the attacks of the bed-bug which I have proposed or advocated, if the latter term should be thought more appropriate, of course was never intended to apply to animals provided with wings or a spinning apparatus ; to prevent their access to beds, recourse must be had to musquito-curtains, or to some similar contrivance ; but with regard to spiders, as they do not seek to prey upon or even to come in contact with the human species, and as the pain consequent upon the wounds which our more powerful indigenous species are capable of inflicting is very slight and speedily subsides, there is nothing to be apprehended from the Araneida of Great Britain.

I am, my dear Sir, very truly yours,

JOHN BLACKWALL.

DESCRIPTION OF SARCOPTILUS, A NEW GENUS OF PENNATULIDÆ.

BY J. E. GRAY, ESQ., F.R.S. ETC.

Sir William Jackson Hooker lately sent to the British Museum some bottles containing animals in spirits, some from New Zealand, others from South America, and some without any habitats : amongst the latter there is a fine specimen of a Sea Pen, resembling the true genus *Pennatula* in general form, but differing from it most essentially in the form of the *pinnae* and their substance, and presenting a most interesting new form in the family.

Each of the *pinnae* resemble the frond of *Renilla*, Lam. ; they are placed in two crowded rows, one on each side of the upper part of the axis, and, like that genus, they have the polypes scattered over the upper surface of the *pinnae*, which, as well as the surface of the stem, do not exhibit any spicula, but are smooth and fleshy.

This genus may be considered as the passage between *Pennatula* and *Renilla*.

SARCOPTILUS.

Coral pen-shaped ; *shaft* thick, fleshy, attenuated towards the tip, smooth, slightly striated longitudinally, and granulose on the surface ; *axis* subquadrangular, rather thick, flexible when moist, formed of concentric coats and longitudinal fibres. *Pinnae* placed in two crowded rows, one on each side of one of the faces of the upper part